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**BACHELOR OF PHYSIOTHERAPY**  
**First Year SUPPLEMENTARY : WINTER- 2022**  
**SUBJECT : HUMAN PHYSIOLOGY**

Day : Tuesday

Time : 02:00 PM-05:00 PM

Date : 27-12-2022

**W-25045-2022**

Max. Marks : 80

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Section A and Section B should be written on **SEPARATE** answer sheets.
  - 3) Draw neat and clean diagrams **WHEREVER** necessary.
  - 4) Figures to the right indicate **FULL** marks.
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**Section A**

**Q.1 Long Answer Questions (Attempt Any Two): (2 x 10 = 20)**

- a) Define cardiac output. Describe various factors determining cardiac output. Add a note on ejection fraction. (1+7+2)
- b) Describe in details chemical regulation of respiration. Add a note on hypoxia. (7+3)
- c) Describe origin and spread of cardiac impulse. Draw a well labelled diagram of normal electrocardiogram in lead II. (7+3)

**Q.2 Short Essay Questions (Attempt Any Four): (4 x 5 = 20)**

- a) Respiratory changes during moderate exercise.
- b) Deglutition reflex.
- c) Ovarian changes in menstrual cycle.
- d) Physiological actions of growth hormone.
- e) Peculiarities of pulmonary circulation.

**Section B**

**Q.3 Long Answer Questions (attempt Any Two): (2 x 10 = 20)**

- a) Enlist various ascending tracts. Describe origin, course and termination of dorsal column tracts. What are the effects of damage to dorsal column tracts? (2+6+2)
- b) Describe the events occurring during transmission of impulse across neuromuscular junction in a skeletal muscle. Add a note on myasthenia gravis. (7+3)
- c) Enlist various functions of hypothalamus. Describe any four functions in detail. (4+6)

**Q.4 Short Essay Questions (Attempt Any Four): (4 x 5 = 20)**

- a) Functions of basal ganglia.
- b) Micturition reflex.
- c) Action potential in a large myelinated nerve fiber
- d) Types of deafness
- e) Functions of platelets

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